20

25

Docket No. AUS920000752US1

#### CLAIMS:

What is claimed is:

5 1. A method for reporting failures, comprising: detecting a predetermined number of consecutive correctable errors;

storing a description for each of the predetermined number of correctable errors;

10 determining whether the descriptions for the predetermined number of correctable errors are the same; and

reporting a bit line or driver failure if the descriptions for the predetermined number of correctable errors are the same.

- 2. The method of claim 1, wherein the step of detecting a predetermined number of correctable errors comprises performing a periodic scan for a processor.
- 3. The method of claim 1, wherein the step of storing a description for each of the predetermined number of correctable errors comprises storing the descriptions in an error data structure.
- 4. The method of claim 3, wherein the error data structure comprises an error table.
- 5. The method of claim 3, further comprising: 30 clearing the error data structure if an

#### Docket No. AUS920000752US1

uncorrectable error occurs before detecting the predetermined number of consecutive correctable errors.

- 6. The method of claim 1, wherein the step of reporting a bit line or driver failure comprises: creating an error log; and returning the error log to an operating system.
- 7. The method of claim 1, wherein the predetermined 10 number is five.
  - 8. The method of claim 1, wherein each description comprises an address at which an error occurred and an error signature that indicates which bit is bad.

15

- 9. The method of claim 1, further comprising: deconfiguring the processor if the descriptions for the predetermined number of errors are the same.
- 20 10. The method of claim 9, wherein the step of deconfiguring the processor comprises dynamically deconfiguring the processor.
- 11. The method of claim 9, wherein the step of 25 deconfiguring the processor comprises deconfiguring the processor at boot time.
- 12. The method of claim 1, further comprising: replacing the processor if the descriptions for the 30 predetermined number of correctable errors are the same.

# Docket No. AUS920000752US1

13. An apparatus for reporting failures, comprising: detection means for detecting a predetermined number of consecutive correctable errors;

storage means for storing a description for each of the predetermined number of correctable errors;

determination means for determining whether the descriptions for the predetermined number of correctable errors are the same; and

reporting means for reporting a bit line or driver 10 failure if the descriptions for the predetermined number of correctable errors are the same.

- 14. The apparatus of claim 13, wherein the detection means comprises performing a periodic scan for a processor.
- 15. The apparatus of claim 13, wherein the storage means comprises an error data structure.
- 20 16. The apparatus of claim 15, wherein the error data structure comprises an error table.
- 17. The apparatus of claim 15, further comprising:
   means for clearing the error data structure if an
   uncorrectable error occurs before detecting the
   predetermined number of consecutive correctable errors.
  - 18. The apparatus of claim 13, wherein the reporting means comprises:
- means for creating an error log; and means for returning the error log to an operating

Docket No. AUS920000752US1

system.

19. The apparatus of claim 13, wherein the predetermined number is five.

5

- 20. The apparatus of claim 13, wherein each description comprises an address at which an error occurred and an error signature that indicates which bit is bad.
- 10 21. The apparatus of claim 13, further comprising:

  deconfiguration means for deconfiguring the

  processor if the descriptions for the predetermined
  number of errors are the same.
  - 15 22. The apparatus of claim 21, wherein the deconfiguration means comprises means for dynamically deconfiguring the processor.
  - 23. The apparatus of claim 21, wherein the 20 deconfiguration means comprises means for deconfiguring the processor at boot time.
    - 24. The apparatus of claim 13, further comprising: means for replacing the processor if the
  - 25 descriptions for the predetermined number of correctable errors are the same.
    - 25. An apparatus for reporting failures, comprising: a processor; and
  - a memory, coupled to the processor, having stored therein an error data structure,

### Docket No. AUS920000752US1

wherein the processor detects a predetermined number of consecutive correctable errors, stores a description for each of the predetermined number of correctable errors in the error data structure, determines whether

- 5 the descriptions for the predetermined number of correctable errors are the same, and reports a bit line or driver failure if the descriptions for the predetermined number of correctable errors are the same.
- 10 26. The apparatus of claim 25, wherein the processor detects a predetermined number of consecutive correctable errors by performing a periodic scan for the processor.
- 27. The apparatus of claim 25, wherein the error data structure comprises an error table.
  - 28. The apparatus of claim 25, wherein the processor reports a bit line or driver failure by creating an error log, and returning the error log to an operating system.
  - 29. The apparatus of claim 25, wherein the predetermined number is five.
- 30. The apparatus of claim 25, wherein each description comprises an address at which an error occurred and an error signature that indicates which bit is bad.
  - 31. A computer program product, in a computer readable medium, for reporting failures, comprising:
- instructions for detecting a predetermined number of consecutive correctable errors;

## Docket No. AUS920000752US1

instructions for storing a description for each of the predetermined number of correctable errors;

instructions for determining whether the descriptions for the predetermined number of correctable errors are the same; and

instructions for reporting a bit line or driver failure if the descriptions for the predetermined number of correctable errors are the same.